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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SNIDER, THERESA T

ART UNIT PAPER NUMBER

1744

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/064,322	Applicant(s) HUFFMAN ET AL. S-C	
	Examiner Theresa T. Snider	Art Unit 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 50,732(page 4, 0024), 653(page 5, 0025) and 452(page 6, 0028). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: figure 1: 180, 250,374,552, figure 2: 114,110,190,180,113,22,228,17,236,242,228,264,250,226,240,234, 244,266,250,702,540,520,776,80,88,310,478,410,100, figure 3: 100,106,414,412,416,426, 436,428,418,420,422,402,424,552, figure 4: 476,206,24,254, figure 8: 707, figure 7: 707, 438,450,394,184,260,186,206,160,116,118,24,710,174,172,28,190,310,73,400,236 . Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement

drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to because page 4, 0024 discloses '20' as being a cord wrap however in figure 7 it does not appear to be a cord wrap and page 9, 0040 discloses '700' as being a fabric cover however in figures 7-8 it does appear to be a fabric cover. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities:

Exemplary of such:

Page 9, 0039, it is believed 'Figs. 9 and 10' should be replaced with 'Figs. 7 and 8'.

Appropriate correction is required.

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: it is unclear as to where in the specification is disclosed the bristles on the brush are helically arranged and has at least four rows of bristles. Page 8, 0036 discloses at least three rows of bristles.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1- are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary of such:

Claim 1, lines 5 and 16, should 'liquid' be replaced with 'fluid' to correspond with later occurrences?

Line 5, 'the surface' should be replaced with 'a surface';

Claims 2- 12, 14-15, 17 and 19, line 1, 'An' should be replaced with 'The'.

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Claim 4, lines 4 and 5, 'brush roll' should be replaced with 'agitation brush'.

Claims 9-12, the claims further define structures in the preamble of the Jepson format.

Are these limitations to be considered improvements or ASPA?

Claim 10, line 2, 'a surface' should be replaced with 'the surface';

Line 4, 'a floor' should be replaced with 'the'.

Claim 12, line 1, 'agitation' should be replaced with 'drive';

Line 2, 'the hand tool' lacks proper antecedent basis. Should the claim be dependent on 11 rather than 10?

Claim 13, lines 5 and 16, should 'liquid' be replaced with 'fluid' to correspond with later occurrences?

Line 5, 'the surface' should be replaced with 'a surface';

Lines 26 and 27, 'brush roll' should be replaced with 'agitation brush'.

Claim 16, lines 5 and 16, should 'liquid' be replaced with 'fluid' to correspond with later occurrences?

Line 5, 'the surface' should be replaced with 'a surface'.

Claim 18, lines 5 and 16, should 'liquid' be replaced with 'fluid' to correspond with later occurrences?

Line 5, 'the surface' should be replaced with 'a surface';

Line 27, 'brush roll' should be replaced with 'agitation brush'.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted State of the Prior Art as set forth in the preamble of the Jepson Claims (hereafter ASPA) in view of Losey.

ASPA discloses a similar surface cleaning apparatus however fails to disclose the elongated brush having helically arranged bristles.

Losey discloses a surface cleaning machine with an elongated agitation brush having a multi-row helically arranged bristle brush or a twisted wire brush (col. 2, lines 56-57 and 92-97). It would have been obvious to one of ordinary skill in the art to provide the brush of Losey in ASPA to impart a beating or shaking action to a surface being cleaned to allow for the most effective cleaning thereof.

With respect to claims 9-12, these elements are being read as ASPA, since they are limiting the preamble of the Jepson claim, as further supported by 0033 in the specification.

12. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Losey as applied to claim 1 above, and further in view of Tilgner.

ASPA in view of Losey discloses a similar surface cleaning apparatus however fails to disclose four rows of bristles.

Tilgner discloses an elongated agitation brush with at least four rows of helically arranged bristles. It would have been obvious to one of ordinary skill in the art to provide the at least four bristles of Tilgner in ASPA in view of Losey to allow for the most effective removal of dirt from a surface to be cleaned.

13. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Losey as applied to claim 1 above, and further in view of Clements.

ASPA in view of Losey discloses a similar surface cleaning apparatus however fails to

disclose the wire brush having helically arranged bristles.

Clements discloses a surface cleaning machine with an elongated agitation brush having helically arranged bristles. It would have been obvious to one of ordinary skill in the art to provide the bristle arrangement of Clements in ASPA in view of Losey to allow for the most effective cleaning of a surface by allowing for more effective agitation and pick-up of embedded dirt.

14. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Losey as applied to claim 1 above, and further in view of Conrad.

ASPA in view of Losey discloses a similar surface cleaning apparatus however fails to disclose the elongated agitation brush mounted to the housing through a pair of arms and a spring.

Conrad discloses a surface cleaning machine with an elongated agitation brush mounted to a housing through a pair of arms wherein a spring is located between the arms and the housing to bias the brush into contact with the surface to be cleaned (col. 4, lines 28-30 and 65-col. 5, line 9). It would have been obvious to one of ordinary skill in the art to provide the brush mounting means of Conrad in ASPA in view of Losey to allow the brush to move more easily in the vertical direction in response to the pile of surface.

15. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted State of the Prior Art as set forth in the preamble of the Jepson Claim (hereafter ASPA) in view of Conrad.

ASPA discloses a similar surface cleaning apparatus however fails to disclose the elongated agitation brush mounted to the housing through a pair of arms and a spring.

Conrad discloses a surface cleaning machine with an elongated agitation brush mounted to a housing through a pair of arms wherein a spring is located between the arms and the housing to bias the brush into contact with the surface to be cleaned (col. 4, lines 28-30 and 65-col. 5, line 9). It would have been obvious to one of ordinary skill in the art to provide the brush mounting means of Conrad in ASPA to allow the brush to move more easily in the vertical direction in response to the pile of surface.

Allowable Subject Matter

16. Claims 5-8, 14-15, 17 and 19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

17. Claims 16 and 18 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

18. The following is a statement of reasons for the indication of allowable subject matter: the prior art discloses the use of a fabric cover for an agitation member HOWEVER fails to disclose the fabric cover encircling an elongated agitation brush and removably mounted thereto for contacting the surface to be cleaned. The prior art discloses a surface cleaning apparatus having an elongated agitation brush mounted to a housing by a pivot arm wherein the transfer of vibrational energy from the brush to the housing is impeded through the use of a web HOWEVER fails to disclose or fairly suggest the placement of a resiliently mounted projection

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on the pivot arm to bear against a surface of the housing to resist vibrations of the brush with respect to the housing.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Peabody discloses a floor treating apparatus wherein the transfer of vibrational energy from a cylindrical brush to it's housing is impeded through the use of a web. Taylor and Jonsson disclose surface cleaning apparatus with elongated agitation brushes that spring bias the brush to a surface being cleaned. Zahuranec et al. discloses an extractor with helically arranged bristles. Giddings et al. discloses a surface cleaning apparatus with a fabric agitation member. Downey and Brundula disclose a surface cleaning apparatus having an elongated agitation brush with multi-row, helically arranged bristles. Mondigo et al. discloses a hand tool with an elongated agitation brush. Parker et al. discloses a surface cleaning apparatus with a keyway mounting element for the elongated agitation brush.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Thursday (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Theresa T. Snider
Primary Examiner
Art Unit 1744

9/6/2004